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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,624	11/07/2000	Kenneth J. Overton	4904.2-4	9914

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MUNSCH, HARDT, KOPF & HARR, P.C.
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EXAMINER

DESIR, JEAN WICEL

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,624

Applicant(s)

OVERTON ET AL.

Examiner

Jean W. Désir

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by DiCicco et al (5,892,554). (*This is the same rejection mailed on 5/22/03*).

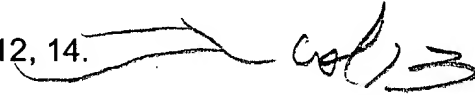
Claim 1:

DiCicco discloses:

“receiving a stream of original images taken by a camera of a real site;
for each original image in the image stream, identifying a background area within the original image from at least one target area in which a target image will be inserted”,
see Figs. 1, 2 items 26, 48, 49, col. 7 lines 61-63;

“rendering, for each at least one target area, a target image based on at least a predefined three-dimensional model of the at least one target area within the site and the camera's position and pointing direction” col. 12 lines 52-67, col. 11 lines 39-52;

"identifying occlusions within the at least one target area of the original image",
see col. 12 lines 1-8, Fig. 5 item 106;

"and combining the background of the original image, the at least one target
image, and the image of the occlusions into an output image" see Fig. 5 items 110,
116, Figs. 12, 14. 

Claim 2 is disclosed, see col. 5 lines 3-12.

Claim 3 is disclosed, see col. 11 lines 39-52, col. 12 lines 33-67.

Claim 4 is disclosed, see col. 11 lines 39-42.

Claim 5 is disclosed, see col. 11 lines 39-52, col. 12 lines 52-67.

Claims 6-8 are disclosed, see col. 11 lines 39-52, col. 12 lines 52-67.

Claim 9 is inherent to DiCicco's disclosure.

Claims 10, 11 are disclosed, see col. 7 line 61 to col. 8 line 7, col. 11 lines 39-53.

Claim 12:

"a model renderer for generating, a synthetic image based on a predefined
three-dimensional reference model of a target area within a site from a known
position of a camera, the synthetic image having a target image inserted in the target
area", see col. 12 lines 52-67, col. 11 lines 39-52, col. 7 lines 61-63, Fig. 14;

"an image separator for masking from a video image contained within a frame
of a video signal generated by the camera, the target area to create a masked
background image", see col. 5 lines 7-12, col. 7 lines 61-67;

"and an image combiner for combining the masked background image with the
target image", see Fig. 5 items 110, 116, Figs. 12, 14.

Claim 13 is disclosed, see col. 7 line 61 to col. 8 line 7, col. 11 lines 39-53, Fig. 5 items 110, 116, Figs. 12, 14.

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive.

Applicants argue on page 2 and 3 of the REMARKS "Thus, DiCicco discloses use of only a two-dimensional reference array for determining insertion regions within a scene. It does not disclose or suggest "rendering, for each at least one target area, a target image based on at least a predefined three-dimensional model of the at least one target area", as recited by Claim 1 (emphasis added), or "a model renderer for generating, a synthetic image based on a predefined three-dimensional reference model of a target area within a site" as recited by Claim 12 (emphasis added)". These arguments are not persuasive, because DiCicco disclosure is not only based on a two-dimensional reference model as argued by the Applicants, DiCicco disclosure is also suggested a three-dimensional reference model as claimed, because the camera 12 is pointing in relation to a known or predefined three-dimensional scene of a site, see Fig. 1 where the camera is pointing to a three-dimensional scene (baseball game), and see also col. 16 lines 18, 23, col. 17 line 8.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jean W. Désir** whose telephone number is (703) 308-9571.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller**, can be reached at (703) 305-4795.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JWD
Oct. 30, 03


MICHAEL H. LEE
PRIMARY EXAMINER